

## Case 3118

***Anthaxia* Eschscholtz, 1829 (Insecta, Coleoptera): proposed designation of *Buprestis nitida* Rossi, 1792 (currently *A. fulgurans* (Schrank, 1789)) as the type species**

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**Abstract.** The purpose of this application is to maintain the long accepted usage of the name *Anthaxia* Eschscholtz, 1829 for one of the largest genera in the BUPRESTIDAE by designating the originally included species *Buprestis nitida* Rossi, 1792 (a junior subjective synonym of *B. fulgurans* Schrank, 1789) as the type species. The earliest designations were of other species, but acceptance of these would cause confusion in buprestid nomenclature.

**Keywords.** Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Anthaxia*; *Anthaxia fulgurans*; *Buprestis nitida*.

1. The buprestid genus *Anthaxia* Eschscholtz, 1829 (p. 9) currently includes about 800 species but originally contained only four nominal species; these were cited (without mention of any authorship) as *Buprestis cyanicornis*, *B. manca*, *B. nitida* and *B. quadripunctata*. In addition to mentioning these names Eschscholtz gave a very brief description of the genus.

2. Several authors have (validly or otherwise) designated type species of *Anthaxia*:

(1) Westwood (1840, p. 24) mentioned that the genus contained four species and gave '*B. nitidula* Linn.' (*B. nitidula* Linnaeus, 1758, p. 410) as the type; he referred to pl. 31 of Curtis (1824) which illustrates *B. nitidula*. Perhaps Westwood believed that Eschscholtz had meant *B. nitidula* rather than *B. 'nitida'*, but since this nominal species had not been included by Eschscholtz the designation is invalid.

(2) Duponchel (p. 582 in d'Orbigny, 1842) said of *Anthaxia* 'Nous n'en citerons que quelques unes: 1. l'*A. manca*, *Buprestis* id. Fabricius, qui peut être considérée le type du g., ...'. This is a valid designation of *B. manca* Linnaeus, 1767 (p. 1067) as the type species.

(3) Thomson (1859, p. 100) gave '*4-punctata* (Lin.)' as the type species; were it not for Duponchel's earlier designation of *B. manca* this would have fixed *B. quadripunctata* Linnaeus, 1758 (p. 410) as the type.

(4) Desmarest (p. 40 in Chenu, 1860) cited *B. manca* as the type, in agreement with Duponchel's earlier designation.

(5) Richter (1949, p. 45) gave *B. fulgurans* Schrank, 1789 (p. 85) as the type species; although this was not an originally included nominal species (see para. 1 above) its name is a senior subjective synonym of *B. nitida* Rossi, 1792 (p. 63) (see Kerremans, 1892, p. 121). However, because Richter did not mention the synonymy, under

Article 69.2.2 of the Code his statement does not constitute a fixation of *B. nitida* as the type species.

3. If either of the first designations of originally included nominal species (those by Duponchel of *B. manca* and by Thomson of *B. quadripunctata*) were to be followed there would be much confusion in the taxonomy and nomenclature of *Anthaxia*, which is one of the largest genera in the BUPRESTIDAE. *B. manca* was designated by Richter (1949, p. 181) as the type species of his subgenus *Anthaxia* (*Trichocrateromerus*); although this subgeneric name had been published earlier (Richter, 1944, p. 126) it takes availability only from 1949 when the type species was designated (Article 13.3 of the Code). *Anthaxia quadripunctata* (Linnaeus, 1758) is extremely close to (and is often treated as a senior synonym of) *A. godeti* Gory & Laporte, 1839, which is the type species of *Anthaxia* (*Melanthaxia*) Richter; as with *Trichocrateromerus*, *Melanthaxia* was published by Richter in 1944 (p. 129) but became available only when the type species was designated (Richter, 1949, p. 102). The subgenus *Melanthaxia* contains about 100 species and is one of the best defined groups or subgenera in the modern concept of *Anthaxia* (see Schaefer, 1936, 1937, 1949; Richter, 1944, 1949; Cobos, 1956, 1958, 1986; Obenberger, 1930, 1958; Bílý, 1982, 1997; Holynski, 1989; Nelson, 1985), and if Thomson's designation of *B. quadripunctata* were adopted all these would have to be shifted to *Anthaxia* s. str. and those (about 300 species) at present in *Anthaxia* s. str. (treated as typified by *B. nitida* Rossi) would have to be given a new subgeneric name.

4. Because *Anthaxia* has for many years been treated as typified by *B. nitida*, a nominal species originally included by Eschscholtz, I propose that stability would be served by designation of this as the type species. As already mentioned, since Kerremans (1892, p. 121) *B. nitida* has been treated as a junior subjective synonym of *B. fulgurans* Schrank, 1789 (p. 85), now known as *A. fulgurans*.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Anthaxia* Eschscholtz, 1829 and to designate *Buprestis nitida* Rossi, 1792 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Anthaxia* Eschscholtz, 1829 (gender: feminine), type species by designation in (1) above *Buprestis nitida* Rossi, 1792 (a junior subjective synonym of *Buprestis fulgurans* Schrank, 1789);
- (3) to place on the Official List of Specific Names in Zoology the name *fulgurans* Schrank, 1789, as published in the binomen *Buprestis fulgurans* (senior subjective synonym of the specific name of *Buprestis nitida* Rossi, 1792, the type species of *Anthaxia* Eschscholtz, 1829 as ruled in (1) above).

## References

- Bílý, S. 1982. The Buprestidae (Coleoptera) of Fennoscandia and Denmark. *Fauna Entomologica Scandinavica*, **10**: 1–109.
- Bílý, S. 1997. A world catalogue of the genus *Anthaxia* Eschscholtz, 1829 (Coleoptera, Buprestidae). *Folia Heyrovskyana*, Suppl. 2. 190 pp.
- Cobos, A. 1956. Ensayo monográfico sobre las *Anthaxia* Eschs. (Coleoptera, Buprestidae) de América. Primera parte. *Archivos de Instituto de Aclimatación*, **5**: 103–165.

- Cobos, A. 1958. Ensayo monográfico sobre las *Anthaxia* Eschs. (Coleoptera, Buprestidae) de América. Segunda parte. *Archivos de Instituto de Aclimatación*, 7: 69–126.
- Cobos, A. 1986. *Fauna Iberica de Coleopteros Buprestidae*. 364 pp. Consejo Superior de Investigaciones Científicas, Madrid.
- Chenu, J.C. (Ed.). 1860. *Encyclopédie d'histoire naturelle ou traité complet de cette science*, vol. 3. 360 pp. Maresque, Paris.
- Curtis, J. 1824. *British entomology; being illustrations and descriptions of the genera of insects found in Great Britain and Ireland*, vol. 1.
- Eschscholtz, J.F. 1829. *Abbildungen und Beschreibungen neuer Tierarten, während des Flottcaptains v. Kotzebue zweiter Reise um die Welt, auf der Russisch-Kaiserlichen Kriegsschiff Predpriaetie in den Jahren 1823–1826*. Zoologischer Atlas. erste Hefte. 17 pp.
- Holynski, R. 1989. The content and systematic position of *Cylindrophora* Solier, 1851 (Coleoptera, Buprestidae). *Elytron*, 3: 163–167.
- Kerremans, C. 1892. Catalogue synonymique des Buprestides décrits de 1753 à 1890. *Mémoires de la Société Entomologique de Belgique*, 1: 1–304.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- Linnaeus, C. 1767. *Systema Naturae*, Ed. 12. vol. 1, pars 2 (pp. 533–1327). Salvii, Holmiae.
- Nelson, G.L. 1985. Clarification of the taxonomic status in various genera of the family Buprestidae (Coleoptera). *The Coleopterist's Bulletin*, 39: 133–146.
- Obenburger, J. 1930. Buprestidae II. Pp. 213–568 in Junk, W. & Schenkling, S. (Eds.), *Coleopterorum Catalogus*, vol. 12, Part 111. W. Junk, Berlin.
- Obenberger, J. 1958. Buprestides trouvés par l'expédition chino-soviétique 1955 en de Chine meridionale (Col., Buprestidae). *Acta Societatis Entomologicae Cechosloveniae*, 55: 223–243.
- Orbigny, C.D. d'. (Ed.). 1842. *Dictionnaire universel d'histoire naturelle*, vol. 1. 795 pp. Paris.
- Richter, A.A. 1944. *Anthaxia* of the Caucasus (Coleoptera, Buprestidae). *Zoologitsheski Sbornik Akademii Nauk Armianskoi SSR*, 3: 109–130. [In Russian].
- Richter, A.A. 1949. Buprestidae. *Fauna of the U.S.S.R.*, vol. 13, no. 2. 255 pp. Izdatelstvo Akademii Nauk SSSR, Moskva and Leningrad. [In Russian].
- Rossi, P. 1792. *Mantissa insectorum* .... vol. 1. 148 pp. Polloni, Pisis.
- Schaefer, L. 1936. Les *Anthaxia* de France (Coleoptera, Buprestidae). Essai monographique. *Annales de la Société Entomologique de France*, 105: 301–354.
- Schaefer, L. 1937. Les *Anthaxia* de France (Coleoptera, Buprestidae). Suite et fin. *Annales de la Société Entomologique de France*, 106: 173–282.
- Schaefer, L. 1949. Les Buprestides de France. *Miscellanea Entomologica*, Supplementum. 511 pp.
- Schrank, F. von P. 1789. Entomologische Beobachtungen. *Der Naturforscher* (Halle), 24: 60–90
- Thomson, C.G. 1859. *Skandinavians Coleoptera*. 290 pp. Tryekt uti Berlingska Boktryckeriet, Lund.
- Westwood, J.O. 1840. *An introduction to the modern classification of insects*, vol. 2. 587 pp. Longman, Orme, Brown, Green & Longmans, London.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).